

ficent system of trinomials" to an absurdity. It is much easier to name a dozen new species or subspecies than to get rid of one, though erected on a false basis. Let us then weave our ornithological net so open-meshed that the undesirable small fry of incipient local forms may readily pass through and escape till further differentiation, in future ages, shall render them desirable captures.*

ON THE EASTERN FORMS OF *GEOTHTYPIS TRICHAS*.

BY FRANK M. CHAPMAN.

THREE years ago I obtained in Florida several Maryland Yellowthroats which apparently differed from northern specimens of this bird. During succeeding winters additional examples were secured, but being unable to obtain summer specimens, which without fear of error could be considered resident birds, I was unwilling to call attention to what I supposed was an undescribed form of this species resident in Florida. Thus the matter rested until recently, when Mr. W. E. D. Scott very courteously placed at my disposal his entire series of Florida specimens. In attempting now with the aid of this additional material to determine the status of the Florida bird, I found it would also be necessary to ascertain the relationships of the Mississippi Valley bird, to which the Audubonian name *roscoe* has recently been applied. To this end, therefore, through the kind offices of fellow naturalists, I have accumulated a large amount of material, in all somewhat over three hundred specimens.

The relationships of the Mississippi Valley bird.— From this region I have a series of some sixty specimens, of which thirty-eight are adult males in breeding plumage; with these I shall make my comparisons. Occupying an intermediate geographical position between the true *patriæ* of both the eastern and the

* In this connection I would call attention to the sagacious note of warning sounded by Dr. Coues in 1884, in the Preface to his 'Key to North American Birds' (p. xxvii, second paragraph).

western forms, the birds themselves are in a degree intermediate, as Mr. Ridgway has already shown.* In the extent of the yellow markings of the underparts, they approach *occidentalis*; in the restriction and coloration of the ashy band bordering the black facial mask, and in measurements, they agree with true *trichas*. In order to express the approximate degree of relationship they bear to each form, I have adopted the following method: Selecting from the Mississippi Valley lot two series, each of five specimens, representing respectively the extremes of coloration of both upper and under surface with their connecting stages, I have given to each stage a purely nominal, but relative, value. Thus the most highly colored specimen in either series I have rated at five, the next at four, and so on. These representative series I have used as a standard of comparison for (1) a series of true *trichas* from the Atlantic States, for (2) the Mississippi Valley series, and for (3) a small but representative series of *occidentalis*, taken throughout its range. In the appended table I present an average of the results obtained, including also the average measurements of these specimens, all of which are adult males in breeding plumage.

	Wing	Tail	Tarsus	Exposed Culmen	Extent of Yellow	Ashy border
20 specimens						
from Atlantic States	2.20	2.04	.77	.42	2.65	3.33
38 specimens						
from Mississippi Valley	2.20	2.02	.77	.42	3.73	3.36
10 specimens						
of <i>occidentalis</i>	2.25	2.14	.77	.42	4.60	4.60

An examination of this table shows how well it sustains the previous conclusion that the Mississippi Valley birds, as a whole, are nearer the eastern than the western form. Considering them now individually, I find there is not a specimen in the series of thirty-eight males which I cannot match in the series from the Atlantic States, nor is there a specimen in this latter series which does not find its counterpart among the birds from the Mississippi Valley. In neither series do I find a specimen as highly colored as are the extreme examples of *occidentalis*. I think, therefore, we may safely refer the Mississippi Valley bird to *Geothlypis trichas verus*.

*Manual N. A. Birds, p. 523, foot-note.

The *Sylvia* (*Geothlypis*) *roscoe* of Audubon, based on an *immature* male specimen taken in Mississippi in September, I do not consider identifiable; if the description does refer to the Mississippi Valley bird, I am at a loss to see on what characters its separation can be urged, and I do not, therefore, consider it worthy of recognition. The *Geothlypis trichas roscoe* of Hasbrouck, the types of which I have examined, based on winter specimens from Florida, I hope to show is referable to the resident Florida form, and not to the bird occupying the Mississippi Valley.

On the relationships of the Florida bird. — For the resident Florida bird, which I consider worthy of recognition, I propose the name

***Geothlypis trichas ignota*, subsp. nov. FLORIDA**
YELLOW-THROAT.

Geothlypis trichas roscoe HASBROUCK, Auk, VI, 1888, p. 167 (in part: not *Sylvia roscoe* AUD. Orn. Biog., I, 1831, p. 124, Pl. xxix).

SUBSP. CHAR. — Similar to *Geothlypis trichas* (Linn.), but with longer tarsus, tail, and bill; yellow of underparts of a deeper shade and greater extent; flanks of a much darker color; the upper parts browner; the facial mask wider, with its ashy border (in summer specimens) slightly paler and of greater extent. First primary shorter, equalling the eighth instead of the sixth, as in *Geothlypis trichas*.

Adult male in breeding plumage.—Type No. 3982, Coll. W. E. D. Scott, Tarpon Springs, Florida, May 19, 1887. Above olive green with a slight rusty tinge, somewhat lighter on the rump and tail; wings brownish, the feathers edged with the color of the back, the outer web of the first primary whitish, the carpal bend yellow. A broad black facial mask includes laterally the eyes, auriculars, and sides of the throat, reaching on the forehead to near the posterior margin of the eyes, and is bordered by a band of hoary ash, which has no abrupt posterior termination but, suffusing the crown, changes gradually into the color of the back. Under parts rich yellow, whitish on the centre of the abdomen; flanks rich ochraceous brown, the sides of the breast slightly washed with the same color. *Measurements*: Wing, 2.26; tail, 2.32; tarsus, .84; exposed culmen, .50 inch.

Remarks. — In this plumage I have three specimens: No. 6070, in Mr. Scott's collection, taken at Tarpon Springs, June 12, 1888, is in very-worn plumage, and largely for this reason differs from the type in having much less ashy color on the crown, in being greener above and in having the flanks paler, the yellow, however, being of about equal extent. No. 61,135 of the U. S. National Museum, taken by Prof. Leconte in Liberty County, on

the coast of middle Georgia, is without date of capture, but is evidently a spring bird. It differs from the type in the greater extent of the ashy border which, mixed with yellowish, reaches to the nape.

Adult female in breeding plumage.—Type No. 3462, Coll. W. E. D. Scott, Tarpon Springs, Florida, May 27, 1887. Similar in color to the male, but without the black mask and ashy border, the crown being rusty brownish, paler on the forehead. The under surface is very similar to that of the average spring male specimen of *Geothlypis trichas*, but the yellow is of a deeper shade. *Measurements:* Wing, 2.14; tail, 2.15; tarsus, .84; exposed culmen, .48 inch.

First plumage.—No. 3844, Coll. W. E. D. Scott, Tarpon Springs, Florida, July 16, 1886. Similar to young of *Geothlypis trichas* in same stage of plumage, but throat, breast, and upper parts of a darker color.

Adult male in winter. Similar to adult male in the spring but darker above, the ashy band bordering the black mask restricted to a narrow line; crown rich rusty brown, brighter anteriorly, where also the feathers have more or less ashy and yellowish bases,—and fading gradually into the color of the back; abdomen somewhat paler. *Measurements*,—average of fourteen specimens: wing, 2.20; tail, 2.23; tarsus, .82; exposed culmen, .47 inch.

Remarks.—An examination of the types *Geothlypis trichas roscoe* Hasbrouck, kindly loaned me for examination by Mr. Hasbrouck, shows that it is based on a bird in winter plumage. That this is not the northern bird in winter plumage is apparently evident on comparing it with adult fall specimens of *trichas* from the northern States, from which it may be distinguished (1) by its size and much browner color above, particularly on the crown; (2) by the somewhat greater width of the black mask, and restriction and slightly deeper shade of its bordering ashy band; (3) by the extent and greater intensity of the colors of the underparts; and by the wing formula, the first primary equalling the eighth, and not the sixth as in *trichas*.

A specimen from Liberty County, Georgia (U. S. Natl. Mus., No. 32,232, Leconte) resembles the Florida birds in coloration but has the first primary somewhat longer than the average. A specimen from New Orleans, Louisiana, (U. S. Natl. Mus. No. 90,665, Nov. 26, Shufeldt) is fully as dark above as the Florida bird, but differs in having the ashy border to the black mask wider, with the yellow of the underparts somewhat lighter in color and of less extent, there being consequently more white on the abdomen, and the wing formula does not agree with that of Florida

specimens. A second specimen from New Orleans (Coll. Gustave Kohn, Oct. 30, 1889) is very similar to the bird just mentioned. Two adult males in the collection of Dr. A. K. Fisher (Nos. 2585 and 2586, June 1, 1886), from the same locality, agree in coloration with typical eastern specimens of *trichas*; No. 2585 has the abdomen lightly washed with yellow, but in No. 2586, this color is restricted to the throat, breast and crissum. The measurement of wing and tail correspond with those of northern examples, but the bill is nearly as large as any Florida specimen I have examined. These Louisiana specimens are very puzzling, and without the aid of further material it will be impossible to accurately determine the exact relationships of birds from this region.

Mr. Hasbrouck's collection contains examples of *ignota* from Palatka and Big Lake George, Florida; I have taken specimens at Gainesville, finding also as late as April 29 typical specimens of *trichas*. Six birds taken on the east peninsula opposite Micco, Brevard County, are apparently all referable to the northern form, though several are intermediate. They were, however, taken in a heavy growth of 'sedge' (*Borrichia frutescens*), while the resident bird, I think, favors the low growth of scrub-palmettos (*Chamærops serrulata*) which affords it excellent opportunities for concealment. Mr. Scott's collection contains nine adult winter males, six of which are referable to *ignota*, while the others are apparently more northern wintering birds. These six specimens, four taken in October and two in February, agree very closely among themselves, having the ashy crown band much restricted, the tail as long or longer than the wing, and tarsus .80 inch or more.

Adult female in winter.—Similar to adult fall specimens of *trichas*, but darker above, with the yellow of the breast and underparts washed with brownish.

Immature birds.—Immature birds of both sexes are not readily distinguishable from wintering northern specimens, and from the nature of the case there are at this season specimens showing every degree of intergradation, both as regards size and coloration. Generally speaking the resident birds are slightly darker above, with the marking of the under-surface deeper in color and of greater extent.

I am so deeply indebted for the loan of material that it is difficult for me to adequately express my thanks. Mr. Scott's splendid series of some sixty Florida specimens alone made this paper

possible; Mr. Ridgway sent me from the U. S. National Museum a large number of Mississippi Valley birds, and from the same region I also received specimens from Mr. Ruthven Deane, Mr. Gustave Kohn, Dr. A. K. Fisher, and Dr. F. W. Langdon. Mr. E. M. Hasbrouck permitted me to examine his types of *roscoe*; I had access to a large series of *trichas* containing many fall specimens, in the collection of Mr. J. Dwight, Jr., and have also examined the collections of Mr. George B. Sennett and Dr. E. A. Mearns. To all these gentlemen I return my most grateful thanks; their uniform courtesy in complying with my request has made the gathering of material a pleasure rather than a task.

A SUMMARY OF OBSERVATIONS ON THE BIRDS OF THE GULF COAST OF FLORIDA.

BY W. E. D. SCOTT.

(Continued from Vol. VI, p. 252.)

Lanius ludovicianus. **LOGGERHEAD SHRIKE.**—A common resident species at all points visited on the Gulf Coast. In the vicinity of Tarpon Springs they begin to breed by the last of March. They were common and bred at Punta Rassa, but Mr. Atkins has no records of the species at Key West.

Vireo altiloquus barbatulus. **BLACK-WHISKERED VIREO.**—A regular and common migrant, breeding on the Gulf coast of Florida at least as far north as Anclote Keys, where the birds are *common* during the summer months. They arrive at this point from the south about the last of any of the birds, not appearing till May 18, which is the earliest record, and not becoming common until the first week in June. The species seems to be confined to the low mangrove keys at this point, and rarely visits the main land. Yet it has been taken at Tampa, and I have observed it on two occasions in the town of Tarpon Springs, both times late in the summer of 1886.

Mr. Atkins has observed and taken the birds at both Punta Rassa and Key West, where it is by no means uncommon. He says: "Arrived at Punta Rassa about May 18, 1886. Breeds in low thick growths of mangrove, both on the main land and on outlying keys. Last noted September 5, 1886. Taken at Key West, April 10 and 26, 1887, and observed